

REQUEST FOR COUNCIL ACTION

SUBJECT: Change Order No. 1 with Trane Building Services for the replacement of existing condenser (tower) pumps at City Hall.

SUMMARY: Approval of a change order with Trane Building Services for the replacement of existing condenser/(tower) pumps for the new chiller system at City Hall.

FISCAL

IMPACT: Funding for this project is available through the capital support account, 43410001-4738040.

STAFF RECOMMENDATION:

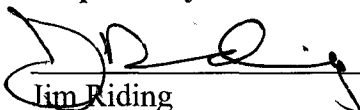
Staff recommends approval of Change Order No. 1 with Trane Building Services for the replacement of existing condenser/(tower) pumps for the new chiller system at City Hall, in an amount not-to-exceed \$17,511.09.

MOTION RECOMMENDED:

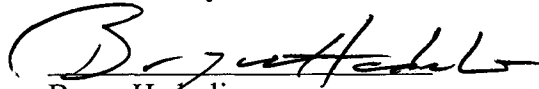
"I move to adopt Resolution No. 14-144 authorizing the Mayor to execute Change Order No. 1 with Trane Building Services for the replacement of existing condenser/(tower) pumps for the new chiller system at City Hall, in an amount not-to-exceed \$17,511.09.

Roll Call vote required.


Prepared by:


Jim Riding
Construction Manager


Reviewed by:


Bryce Haderlie
Assistant City Manager

Reviewed as to Legal Sufficiency:


Jeffery Robinson
City Attorney

Recommended by:


Richard L. Davis
City Manager

BACKGROUND DISCUSSION:

During the installation of the new chiller system at City Hall, Trane discovered that the original contractor that built the building back in 1993 did not install the proper pumps that were required in the design specification of the existing chiller. The original design should typically have had 2 pumps with the capacity of handling the minimum flow through the chiller separately. When Trane scoped the installation of the new chiller they based their pricing to reflect utilizing these condenser pumps. Trane discovered that we need both pumps to run together and the flow barely meets minimum. It is understood that over time there is some degradation of the equipment especially with the age of the pumps, but they should still be able to handle the flow requirements. The existing pumps are original and have never been replaced or upgraded.

This presents a situation where the system could continuously trip the chiller on loss of flow. Trane has designed a replacement configuration utilizing one pump to handle the load with one pump for redundancy. Trane has included variable frequency drives (VFD's) for energy savings and for proper control through the new system upgrade. Trane believes this is a situation where they had no knowledge of this outcome due to possible value engineering that took place from the original design contractor.

Included is Trane's original scope of work for this project with the highlighted section where it describes utilizing the existing pumps.

Attachments:

Change Order
Resolution

THE CITY OF WEST JORDAN, UTAH

A Municipal Corporation

RESOLUTION NO. 14-144

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE CHANGE ORDER NO. 1 BETWEEN THE CITY AND TRANE BUILDING SYSTEMS

Whereas, the City Council of the City of West Jordan has a Change Order request for the replacement of existing condenser pumps for the new chiller system in the amount of \$17,511.09; and

Whereas, the City Council desires to approve Change Order No.1 with Trane Building Services, which change order shall not be binding upon the City of West Jordan unless and until the change order is fully executed by the parties; and

Whereas, the proposed Change Order No.1 between the City of West Jordan and Trane Building Services (a copy of which is attached as **Exhibit A**) for the replacement of existing condenser pumps in an amount not-to-exceed \$17,511.09 has been reviewed; and

Whereas, the City Council of the City of West Jordan has determined that the attached change order with Trane Building Services for an amount not-to-exceed \$17,511.09 is acceptable for the purpose of completing the replacement of existing condenser pumps for the new chiller system.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH:

- Section 1. The Change Order No. 1 for the replacement of existing condenser pumps is hereby approved with Trane Building Services, which approval shall not be binding upon the City of West Jordan until the Change Order is fully executed by the parties
- Section 2. After approval as to legal form by the City Attorney, the Mayor is hereby authorized to execute Change Order No. 1 between the City of West Jordan and Trane Building Services, in an amount not to exceed \$17,511.09.
- Section 3. This Resolution shall take effect immediately.

Adopted by the City Council of West Jordan, Utah, this 13th day of August 2014.

Kim V. Rolfe
Mayor

ATTEST:

Melanie S. Briggs
City Recorder

RESOLUTION NO. 14-144

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE CHANGE ORDER NO. 1 BETWEEN THE CITY AND TRANE BUILDING SERVICES

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	_____	_____
Judy Hansen	_____	_____
Chris McConnehey	_____	_____
Chad Nichols	_____	_____
Ben Southworth	_____	_____
Justin D. Stoker	_____	_____
Mayor Kim V. Rolfe	_____	_____

CHANGE ORDER #1

Page 1 of 4

Date: 7/31/2014

Contract Name: City Hall Chiller Replacement

Contract No.:

Contractor: Trane Building Services

Owner: City of West Jordan

Original Contract Amount: \$478,952.00

Prev. Approved Changes: \$0.00

This Change: \$17,511.09

Revised Contract Amount \$496,463.09

Total Change Orders as a % of Contract 3.66%

This Change Order covers changes to the subject contract as described herein. The Contractor shall construct, furnish equipment and materials, and perform all work as necessary or required to complete the Change Order items for a lump sum price agreed upon between the Contractor and City of West Jordan, otherwise referred to as Owner.

DESCRIPTION OF CHANGES	INCREASE IN CONTRACT AMOUNT (\$)	(DECREASE) IN CONTRACT AMOUNT (\$)	CONTRACT TIME EXTENSION (days)
Item #1 Replace existing condenser pumps for the chiller tower	\$17,511.09		
TOTALS	\$17,511.09	\$0.00	0

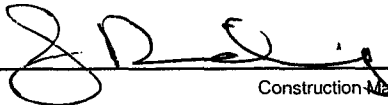
NET CHANGE IN CONTRACT AMOUNT

(INCREASE OR DECREASE)

\$17,511.09

The amount of the contract will be increased (decreased) by the sum of \$17,511.09 and the contract time shall be extended by 0 calendar days. The undersigned Contractor approves the foregoing Change Order as to the changes, if any, in the contract price specified for each item including any and all supervision costs and other miscellaneous costs relating to the change in work, and as to the extension of time allowed, if any, for completion of the entire work on account of said Change Order. The Contractor agrees to furnish all labor and materials and perform all other necessary work, inclusive of that directly or indirectly related to the approved time extension, required to complete the Change Order items. This document will become a supplement to the Contract and all provisions will apply hereto. It is understood that the Change Order shall be effective when approved by the Owner.

ACCEPTED:



Construction Manager

DATE: 8.4.14

APPROVED:

Contracts Administrator

DATE: _____

APPROVED:

Assistant City Manager

DATE: _____

APPROVED:

Mayor

DATE: _____

APPROVED AS TO LEGAL FORM

West Jordan City Attorney

By:  Date: 8-4-14



2817 SOUTH 1030 WEST
SALT LAKE CITY, UT 84119
PHONE: (801) 486-0500 FAX: (801) 486-0752
E-MAIL: JEFF.KAY@TRANE.COM

7/30/2014
West Jordan City
RE: West Jordan City Hall

Jim Riding

This is a follow up letter describing the circumstances surrounding the existing condenser/ (tower) pumps and our justification for their replacement.

What we have discovered is that the original installing contractor that built the building did not install the proper pumps that were required in the design specification of the existing chiller. The original design should typically have had 2 pumps with the capacity of handling the minimum flow through the chiller separately. When we at Trane scoped the installation of the new chiller we based our pricing to reflect utilizing these condenser pumps. We have since discovered that you need both pumps to run together and the flow barely meets minimum. We understand over time there always is some degradation of the equipment especially with the age of the pumps, but they should still be able to handle the flow requirements. The existing pumps are original and never been replaced or upgraded.

This presents a situation where we could continuously trip the chiller on loss of flow. I have designed a replacement configuration utilizing one pump to handle the load with one pump for redundancy. I have included VFD's for energy savings and for proper control through the new system upgrade. I believe this is a situation where we had no knowledge of this outcome due to the value engineering that took place from the original design contractor.

I have included our original scope of work for this project below. I have highlighted the section where it describes utilizing the existing pumps. I have also included the Change Order Proposal for your review.

INTERNAL USE ONLY - SARBANES-OXLEY ACT OF 2002 COMPLIANCE:

Signature: Mr. Stacey Hieb, District Manager

Date

Supply and Install a Chiller and Closed Loop Cooling Tower

EQUIPMENT, INSTALLATION, LABOR & MATERIALS

Scope includes the following activities and requirements.

- **Supply & Install New Trane RTWD Chiller and Closed Loop Cooling Tower:**
 - Lock out and tag out electrical.
 - Provide on sight safety training specific to the site conditions of this project.
 - Provide rigging to facilitate a safe and effective way to move the new chiller to the mechanical room and cooling tower to the existing location.
 - Make all necessary adjustments to the chilled and tower piping needed to accommodate the new chiller and closed loop tower. We will utilize the existing chilled water and tower pumps. We will pipe the new chiller in a parallel loop to utilize the existing chiller as a backup system.
 - Integrate the chiller BACnet interface to the existing Trane Tracer system. Programming for the new chiller only.
 - Provide piping from the new refrigerant vents to the existing header.
 - Insulate the new transition piping and provide repair insulation as needed for piping modifications performed by Trane.
 - Provide a new mechanical pad for the new chiller.
 - Provide a 30% glycol solution in both the chilled and tower system.
 - Balance water flows to match new chiller flow requirements.
 - Install a new manual transfer switch that would feed the existing and new chiller.
 - Make accommodations necessary for the new chiller electrical connections.
 - Includes a new power supply for the refrigerant monitor.
 - Provide Emergency Power Off switches as per code.
 - Provide and install new chilled water coils for both air handlers.
 - Provide local permit and inspection services in accordance with local code.
 - Repair or replacement of building or system deficiency unrelated to this scope of work identified by the building department is not included.
 - Provide and install a stand-alone refrigerant monitor with strobe lights.
 - Trane will provide a 1-year whole unit warranty.
 - Trane chiller will include a 5-year compressor warranty.
 - Trane to provide factory authorized start-up.

INTERNAL USE ONLY - SARBANES-OXLEY ACT OF 2002 COMPLIANCE:

Signature: Mr. Stacey Hieb, District Manager

Date

**TRANE**

Building Services

WE MAKE BUILDINGS WORK BETTER FOR LIFE.™



Trane U.S. Inc. dba Trane

2817 South 1030 West
Salt Lake City, UT 84119-2476
Phone: (801) 486-0500
Fax: (801) 486-0752

July 23, 2014

Jim Riding
Director of Facilities
West Jordan City Of
8030 South 4000 West
WEST JORDAN, UT 84088 U.S.A.
(801) 566-9790
jriding@wjordan.com

Site Address:
West Jordan City Hall
8000 South Redwood Road
WEST JORDAN, UT 84088
United States

Attention: Jim Riding**Project Name:** West Jordan City Hall Condenser Pumps

We are pleased to offer you this proposal for performance of the following services for the Equipment listed. Services will be performed using Trane's Exclusive Service Procedure to ensure you get full benefit of our extensive service experience, coupled with the distinct technical expertise of an HVAC Equipment manufacturing leader. Our innovative procedure is environmentally and safety conscious, and aligns expectation of work scope while providing efficient and productive delivery of services.

Equipment List

Equipment	Qty	Manufacturer	Model Number	Serial Number	Asset Tag
Tower/Condense Pumps	2	Taco Inc.		TBD	P-1 HW

Scope of Service

- Trane will supply and replace the undersized existing condenser water pumps.
- We will replace the 2 existing pumps required to operate together with 2 pumps sized to operate alone to provide proper GPM flow through the chiller.
- Trane will supply and install 2-Trane TR200 VFD's and controls for the new pumps.

INTERNAL USE ONLY - SARBANES-OXLEY ACT OF 2002 COMPLIANCE:

Signature: Mr. Stacey Hieb, District Manager

Date

INTERNAL USE ONLY - SARBANES-OXLEY ACT OF 2002 COMPLIANCE:

Signature: Mr. Stacey Hieb, District Manager

Date

Pricing and Acceptance

“Change Order” Request 1.....17,511.09

Clarifications

1. Applicable taxes are included.
2. Any service not listed is not included.
3. Work will be performed during normal Trane business hours.
4. This proposal is valid for 30 days from July 23, 2014.

I appreciate the opportunity to earn your business, and look forward to helping you with all of your service needs. Please contact me if you have any questions or concerns.

Sincerely,

Jeff Kay
Account Manager
Cell: (801) 842-3584

This agreement is subject to Customer's acceptance of the attached Trane Terms and Conditions – Installation.

CUSTOMER ACCEPTANCE

Authorized Representative

Printed Name

Title

Purchase Order

Acceptance Date

Trane License Number:

INTERNAL USE ONLY - SARBANES-OXLEY ACT OF 2002 COMPLIANCE:

Signature: Mr. Stacey Hieb, District Manager

Date

We would like to thank you in advance for understanding the necessity of this additional work; we want this to be outstanding and reliable system for your long term investment.

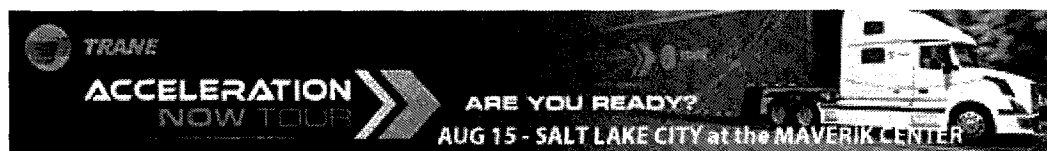
Sincerely,

Jeff Kay
Direct Account Manager
Rocky Mountain Trane
Ingersoll Rand Climate Control Technologies
2817 So. 1030 W.
Salt Lake City, UT. 84119

Office +1.801.415.2048
Mobile +1.801.842.3584
Fax +1.801.486.0752
Email: jeff.kay@trane.com



Ingersoll Rand Family of Brands



INTERNAL USE ONLY - SARBANES-OXLEY ACT OF 2002 COMPLIANCE:

Signature: Mr. Stacey Hieb, District Manager

Date